

REMARKS

I. Status Of Claims

Claims 1-10 are pending in the present application. Claims 1 and 4 have been amended. Claims 2, 3, and 5-10 have been canceled. Claim 11 has been added. Therefore, upon entry of this Amendment, Claims 1, 4, and 11 will be pending. No new matter has been introduced by the present amendment. Reconsideration of the application as amended and based on the arguments set forth hereinbelow is respectfully requested.

II. Claim Rejections Under 35 U.S.C. § 102

Claims 1-6, 8, and 10 stand rejected by the Examiner under 35 U.S.C. §102(e) as being anticipated by U.S Patent No. 6,813,340 to Issaa et al. (hereinafter, "Issaa"). This rejection is respectfully traversed.

Claim 1 has been amended to recite a method for adjusting a ringing signal current in a subscriber line with a controlled ringing signal generator. The ringing signal generator is coupled to the subscriber line and generates a ringing signal voltage. The ringing signal current is dropped across the subscriber line and a load of at least one subscriber is coupled to the subscriber line. Claim 1 has also been amended to recite detecting a ringing signal current flowing through the subscriber line. Further, Claim 1 has been amended to recite comparing the detected ringing signal current with stored current values. Each stored current value is associated with a stored voltage value in dependence of the number of subscribers coupled to the subscriber line and the length of the subscriber line in such a manner that, by adjusting a ringing signal voltage to a

respective stored voltage value, the corresponding ringing signal current is equal to a predetermined optimum current value. Further, Claim 1 has been amended to recite setting the ringing signal voltage to a corresponding voltage value associated with the stored current value if the detected ringing signal current is greater than the predetermined optimum current value. Claim 1 has also been amended to recite that detecting the ringing signal current and adjusting the ringing signal voltage is carried out periodically or once per ringing signal. Summarily, Issaa fails to disclose each and every feature recited by amended Claim 1.

Issaa is directed to a method, system and apparatus for assuring compliance with safety requirements that may be jeopardized by faults in a subscriber line. (Issaa, column 2, lines 11-15 and 56-62.) Issaa discloses continuous monitoring of the ringing voltage and/or the tip/ring (i.e., subscriber line) voltage or current. (Issaa, column 3, lines 62-65.) In particular, Issaa discloses that the tip and ring lines are “snooped” by using a voltage sensor **212** and/or current sensor **214** for providing an indication of whether voltage or current on a tip line **116** or ring line **118** exceeds a threshold. (Issaa, column 3, 65, to column 4, line 3.) Therefore, Issaa teaches continuous monitoring of voltage and current.

In contrast, step (a) of amended Claim 1 requires detecting a ringing signal current flowing through a subscriber line. Further, step (d) of amended Claim 1 requires detecting the ringing signal current periodically or once per ringing signal. Issaa fails to disclose detecting the ringing signal current either periodically or once per ringing signal as required by step (a) of Claim 1.

Further, as previously stated, step (b) of amended Claim 1 recites comparing the detected ringing signal current with stored current values. Amended Claim 1 also recites that each stored current value is associated with a stored voltage value in dependence of the number of subscribers coupled to the subscriber line and the length of the subscriber line in such a manner that, by adjusting a ringing signal voltage to a respective stored voltage value, the corresponding ringing signal current is equal to a predetermined optimum current value. Issaa fails to disclose these features of step (b) of Claim 1. For example, Issaa discloses utilizing stored programming for handling tip/ring faults. However, Issaa does not disclose an association between detected ringing signal current with stored current values as required by step (b) of Claim 1. Issaa teaches that initially desirably high voltage **512** is fed to the subscriber line. (Issaa, column 5, lines 36-40.) Next, as previously stated, Issaa teaches continuously monitoring the voltage and current in the subscriber line for detecting faults. (Issaa, column 5, lines 36-46.) Issaa teaches resetting the voltage to high once a fault in the subscriber line has been cleared. (Issaa, column 5, lines 51-59.) There is no disclosure in Issaa of adjusting a ringing signal voltage to a respective stored voltage value such that the corresponding ringing signal current becomes equal to a predetermined optimum current value as required by step (b) of amended Claim 1. In contrast, Issaa switches between high and low current states for the current ringing subscriber line depending on faults.

For the above reasons, it is believed that Issaa does not disclose each and every feature recited by Claim 1. Therefore, applicants respectfully submit that the rejection of Claims 1 under 35 U.S.C. § 102 be withdrawn and the claim allowed at this time.

Claim 4 and new Claim 11 depend from Claim 1. Therefore, the comments presented above relating to Claim 1 apply equally to Claims 4 and 11. Therefore, applicants respectfully submit that Claims 4 and 11 are patentable over Issaa for at least the same reasons as Claim 1. Further, applicants respectfully submit that the rejection of Claim 4 under 35 U.S.C. § 102 should be withdrawn and the claim allowed.

Claims 2, 3, 5, 6, 8, and 10 have been canceled. Therefore, the rejection of Claims 6, 8, and 10 under 35 U.S.C. § 102 is moot and the rejection should be withdrawn.

III. Claim Rejections Under 35 U.S.C. § 103

Claims 7 and 9 stand rejected by the Examiner under 35 U.S.C. §103(a) as being unpatentable over Issaa in view of U.S. Patent No. 5,260,996 to Dillon et al. (hereinafter, "Dillon"). This rejection is respectfully traversed.

Claims 7 and 9 have been canceled. Therefore, the rejection of Claims 7 and 9 under 35 U.S.C. § 103(a) is moot and the rejection should be withdrawn.

Furthermore, although not cited against Claim 1, applicants respectfully submit that Issaa and Dillon, either alone or in combination, do not teach or suggest each and every feature recited by amended Claim 1. As previously stated, Issaa fails to disclose the Claim 1 features of (1) detecting a ringing signal current of a subscriber line periodically or once per ringing signal; and (2) comparing the detected ringing signal current with stored current values, wherein each stored current value is associated with a stored voltage value in dependence of the number of subscribers coupled to the subscriber line and the length of the subscriber line in such a manner that, by adjusting a ringing signal voltage to a respective stored voltage value, the corresponding ringing signal current is equal to a

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predetermined optimum current value. Further, Issaa fails to suggest these features of Claim 1.

Dillon fails to overcome the significant shortcomings of Issaa. Dillon discloses a ringing device or generator **10**. (Dillon, column 4, lines 18 and 19.) Further, Dillon discloses a power source connected to a converter **12** of ringing device **10**. (Dillon, column 4, lines 20-30.) Dillon also discloses that converter **12** is operable to decrease its output voltage without increasing its power dissipation. (Dillon, column 4, lines 43-45.) However, Dillon fails to disclose or suggest detecting a ringing signal current of a subscriber line periodically or once per ringing signal as required by Claim 1. Further, Dillon fails to disclose or suggest comparing the detected ringing signal current with stored current values as required by Claim 1. For these reasons, applicants respectfully submit that there would be no motivation for one of ordinary skill in the art to combine the references to arrive at the method recited in Claim 1.

For the reasons provided above, applicants respectfully submit that the teachings of Issaa and Dillon cannot be combined to either teach or suggest each and every element of Claim 1, and therefore Claim 1 is patentable over the references.

Claims 4 and 11 depend from Claim 1. As such, it is respectfully submitted that Claims 4 and 11 are patentable over the cited references.

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CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and such action is earnestly solicited.

If any minor issues should remain outstanding after the Examiner has had an opportunity to study the Amendment and Remarks, it is respectfully requested that the Examiner telephone the undersigned attorney so that all such matters may be resolved and the application placed in condition for allowance without the necessity for another Action and/or Amendment.

DEPOSIT ACCOUNT

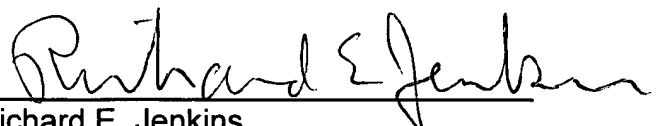
Although it is believed that no fee is due, the Commissioner is hereby authorized to charge any deficiencies of payment associated with the filing of this Response to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS, WILSON & TAYLOR, P.A.

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REJ/BJO/cab

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